

August 27, 2001  
DRAFT

SCIENCE ADVISORY BOARD  
Executive Committee Meeting  
Public Conference Call convened in Room Ariel Rios 6013  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. Washington, DC  
August 27, 2001

**ACTIONS**

**ACTION 1:** The Executive Committee approved the Arsenic Rule Benefits Review Panel's (ARBRP) *"Arsenic Rule Benefits Analysis: An Science Advisory Report"*, subject to changes discussed at the EC meeting and a final review by the vettors: Drs. Stavins, Cameron, and Morgan.

**ACTION 2:** The Executive Committee approved the Research Strategies Advisory Committee's (RSAC) *"Implementation of the Environmental Protection Agency's Peer Review Program: An SAB Report"*, subject to changes discussed at the EC meeting and a final review by the vettors: Drs. Anderson and Trussell.

**ACTION 3:** The Executive Committee approved the Scientific and Technology Achievement Awards (STAA) Subcommittee's *"Recommendations on the FY2000 STAA: An SAB Commentary"*, subject to changes discussed at the EC meeting. There is no need for any additional review by the EC or any vettors.

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**I. Attendees on the line**

**EC Members**

Dr. William Glaze, Executive Committee (EC) Chair  
Dr. Henry Anderson  
Dr. Trudy Cameron  
Dr. Janet Johnson  
Dr. Roger Kasperson  
Dr. Raymond Loehr  
Dr. Morton Lippmann  
Dr. Granger Morgan  
Dr. William Smith  
Dr. Robert Stavins  
Dr. Rhodes Trussell

**Other Science Advisory Board (SAB) Members**

Dr. Richard Bull, Drinking Water Committee (Past Chair) and Research Strategies Advisory Committee  
Dr. Maureen Cropper, Chair Arsenic Rule Benefits Review Panel (ARBRP)

**SAB Consultants**

Dr. Rick Freeman, Arsenic Rule Benefits Review Panel (ARBRP)  
Dr. Michael Hanemann, ARBRP  
D. Irva Hertz-Picciotto, ARBRP  
Dr. Kerry Smith, ARBRP

**Members of the public who identified themselves**

Grant Cope, US Public Interest Research Group (PIRG)  
Matt Corson, Assoc. of State Drinking Water Administrators  
Chad Gorski, National Narrowcast Network  
Diana Neidle, Consumer Federation of America  
Pat Phibbs, BNA Reporter  
Jennifer Renshaw, Industrial Economics  
Lisa Ryan, Industrial Economics

Sign-in sheets (Attachment A) identify others who were present in Room 6013 of the Ariel Rios Building.

The meeting proceeded according to the agenda for the meeting (Attachment B).

## **II. Review the Outputs of Committees**

### **A. Consideration of the Arsenic Rule Benefits Review Panel's (ARBRP) "Arsenic Rule Benefits Analysis: An Science Advisory Report"**

#### **1. Introductions**

Each EC Member provided an introduction of himself/herself (cf. EC Roster -- Attachment C), with a special emphasis on his/her experience and association with the issue of arsenic, particularly as it relates to drinking water controls.

- a. Dr. Glaze provided basic biographical and occupational information about himself. He noted that he had some interactions with water utilities in the past, but this was no longer the case.
- b. Dr. Anderson provided basic biographical and occupational information about himself. He noted that in Wisconsin, it is the Department of Natural Resources, not the Department of Health (DOH), that sets drinking water standards. The DOH is involved in a research project on arsenic in drinking water in northern Wisconsin.
- c. Dr. Cameron provided basic biographical and occupational information about herself. She has had no association with water utilities or with arsenic issues, in particular.
- d. Dr. Johnson provided basic biographical and occupational information about herself. She noted that her employer Shepherd-Miller Inc. (SMI) is a consulting firm that has worked on an arsenic-in-drinking-water project for the government of Fallon, NV, where a leukemia cluster has been reported. While the higher than average level of arsenic in drinking water was an initial focus of the study, attention is now on other potential causes. SMI is conducting bench-scale and pilot-scale work for Fallon, NV, although Dr. Johnson is not directly involved.

Dr. Barnes reported that Dr. Johnson's association with the SMI work in Fallon, as well as her Confidential Financial Statement, had been examined closely and that a determination was made that, in light of the applicable General Services Administration regulations that governs the determination of a conflict-of-interest (COI) in such matters, Dr. Johnson does not have conflict of interest in this particular matter of general applicability.

- e. Dr. Kasperson provided basic biographical and occupational information about himself. He has had no prior involvement with the issues or the players in this matter.
- f. Dr. Lippmann provided basic biographical and occupational information about himself. He has had no prior involvement with the issues or the players in this matter.
- g. Dr. Loehr provided basic biographical and occupational information about himself. He has had no prior involvement with the issues or the players in this matter.
- h. Dr. Granger Morgan provided basic biographical and occupational information about himself. He has had no prior involvement with the issues or the players in this matter. Workers in his department at Carnegie-Mellon have examined the cost/benefit questions of arsenic in drinking water, but Dr. Morgan has not been involved with that work.
- i. Dr. Smith provided basic biographical and occupational information about himself. He has had no prior involvement with the issues or the players in this matter. His research has addressed questions of certain trace metals in forests, but not arsenic.
- j. Dr. Stavins provided basic biographical and occupational information about himself. He has had no prior involvement with the issues or the players in this matter. He did serve as the Chair of the Environmental Economics Advisory Committee (EEAC) when that Committee reviewed the Agency's economic analysis guidelines and the white paper on latency, both of which are referenced in the report before the EC today.
- k. Dr. Trussell provided basic biographical and occupational information about himself. He has had prior involvement with the arsenic-in-drinking-water issue as a Member of both the Science Advisory Board (SAB) and the Board of Scientific Counselors (BOSC). His employer -- Montgomery-Watson -- is involved in the water utilities business, generally dealing with large systems that are not the ones most significantly affected by this rule. He has no connection with companies that provide treatment systems for arsenic in drinking water.

## 2. Introduction of the Report

Dr. Cropper, ARBRP Chair, introduced the report, highlighting four recommendations:

- a. Recognize that the "cessation lag" issue is a more appropriate way to think about what was termed "latency" in the Charge.
- b. Extend the quantitative benefits analysis beyond lung and bladder cancer to include a collection of other endpoints, as well.

- c. Do not include a separate assessment of the benefit resulting from "exposure reduction".
- d. Evaluate cost/benefit determinations by system size.

### 3. Discussants' comments

#### a. Dr. Stavins, Lead Discussant

Dr. Stavins complimented the Panel a very fine job and a very fine report. He submitted written comments (Attachment D), which he reviewed with the EC. In the ensuing discussion regarding "the bottom line" of the report, there was a consensus that the report should include the following points:

- 1) The Panel focused on the how the method was executed.
- 2) A number of methodological recommendations were made, some of which might shift the results in one direction; others which might shift the results in another direction.
- 3) There was neither time nor resources to generate a new assessment.
- 4) Therefore, it was not possible to make a judgment as to the net change that incorporation of these recommendations might make in the final answer. In order to find out, the Agency should re-conduct the analysis, using the recommendations in the report.

#### b. Dr. Cameron, Associate Discussant

Dr. Cameron also complimented the Panel on as a good report. She went on to identify seven specific issues:

- 1) Concern about the explanation for not including "exposure reduction" as a separate benefit.
- 2) Concern about the discussion concerning the blending surface and groundwater, since groundwater is a limited resource that has an existence value of its own.
- 3) Concern about treating all elasticities as equal to zero.
- 4) Concern about distribution of net benefits, encouraging analysts to go beyond single efficiency considerations.
- 5) Concern about the suggestion for age distribution analysis and the implication for Quality of Life Years (QALY) considerations.
- 6) Same concern as Dr. Stavins's on pp. 13-14
- 7) Recommendation to actually show the different distributions that result (cf., p. 16 of the draft report)

#### c. Dr. Morgan, Associate Discussant

Dr. Morgan found the overall report to be quite good. He supplied written comments (Attachment E) that he reviewed with the EC.

#### 4. EC discussion

There was extended discussion about the "separate benefit of arsenic exposure" issue. There was a consensus to deal with the matter in a footnote statement, recognizing that it is a valid point, but that we are unaware of any data that would permit quantitative analysis at this time.

#### 5. Comments from other EC members

a. Dr. Lippmann went through as a modest list of primarily editorial comments (any written version available?)

b. Dr. Smith found the report to be very good. He raised the question of whether the report should have an Executive Summary. The EC reached a consensus that this report was sufficiently short that an Executive Summary would be more redundant than helpful.

c. Dr. Loehr also found the report to be a good one. He urged that some of the points be made more directly.

d. Dr. Johnson submitted written comments that focused on a number of editorial points (Attachment F ).

#### 6. Public Comment

Mr. Grant Cope amplified points made in a letter submitted by a number of organizations (Attachment G). He also referenced as a letter from Dr. Heinzlinger and Dr. Ackerman (Attachment H). His oral comments focused on the discounting issue. He took exception to the SAB's handling of the issue on both substantive and procedural grounds:

a. Substantive points related to the contention that discounting is inappropriate

- 1) Discounting values future generations less than current generations (i.e., the intergenerational equity issue).
- 2) Discounting is biased against long-term diseases
- 3) (I missed this point)
- 4) Discounting cannot be used in this case since there are no data on the latency of cancers arising from arsenic exposure.

b. Procedural issues

- 1) The discounting issue was not within the Charge (purview) of the Panel.
- 2) Appealing to "standard practice" is inappropriate if the "standard practices" themselves are flawed.
- 3) The SAB is an inappropriate forum in which to discuss what is fundamentally a policy question.
- 4) The Panel was devoid of any members who were critical of discounting as an accepted practice.

Mr. Cope recommended that the report contain a sensitivity analysis and that the National Academy of Sciences be called upon to address this issue using a properly balanced set of participants.

#### 7. EC Action

ACTION 1: The Executive Committee approved the Arsenic Rule Benefits Review Panel's (ARBRP) *"Arsenic Rule Benefits Analysis: An Science Advisory Report"*, subject to changes discussed at the EC meeting and a final review by the vettors: Drs. Stavins, Cameron, and Morgan.

B. Consideration of the Research Strategies Advisory Committee's (RSAC) "Implementation of the Environmental Protection Agency's Peer Review Program: An SAB Report"

Dr. Loehr, RSAC Chair, introduced the report that had first been considered by the EC at their July meeting. However, there had not been sufficient time to address the report adequately at that meeting. Dr. Kooyoomjian, DFO for this report, summarized the major changes that had been made since July.

Dr. Anderson, the Lead Discussant, introduced his remarks by observing that he had not received the report with sufficient time to do the quality review that he would have liked. But he had carefully reviewed the July draft. He focused his comments (anything written?) on the "global nature" of some of the assertions in the report that were, in fact, based upon a detailed review of only three case studies. He recommended moving the description of the limitations of the review (items e and f) in the cover letter to the head of the list, rather placing them in their current position at the end of the list.

Dr. Trussell, the Associated Discussant, complimented the RSAC on their generating such a good, clear report. He felt that it is important to show that the peer review program at EPA is quite vast and arguably complex. He urged the SAB to

1. Note that the Board had to limit its original plan in the face of the immensity of the task.
2. Make some recommendation about how the Agency might go about doing and updating as a more fulsome study of the peer review program at EPA.
3. Make some recommendation about the Agency's inconsistency in documenting the operation of the peer review program.

Dr. Kooyoomjian noted that Dr. Morandi, RSAC Member, had submitted some comments (Attachment H) on how the RSAC selected its three case studies.

ACTION 2: The Executive Committee approved the Research Strategies Advisory Committee's (RSAC) *"Implementation of the Environmental Protection Agency's Peer Review Program: An SAB Report"*, subject to changes discussed at the EC meeting and a final review by the vettors: Drs. Anderson and Trussell.

C. Consideration of the Scientific and Technology Achievement Awards (STAA) Subcommittee's "Recommendations on the FY2000 STAA: An SAB Commentary"

Mr. Robert Flaak, DFO for the STAA review, introduced the Commentary. He described it as an outgrowth of an accumulated 15+ years experience by the STAA Subcommittee in reviewing this program.

Dr. Loehr, the Lead Discussant, liked the report, but urged that the report contain more explicit language about what the Agency should do.

Dr. Glaze, the Associate Discussant, also favored the report but found that the language lacked "punch" at certain important points.

ACTION 3: The Executive Committee approved the Scientific and Technology Achievement Awards (STAA) Subcommittee's *"Recommendations on the FY2000 STAA: An SAB Commentary"*, subject to changes discussed at the EC meeting. There is no need for any additional review by the EC or any vetters.

#### **IV. Updates**

Since time had expired, this topic was not discussed.

#### **V. Adjournment**

Dr. Glaze adjourned the meeting at 3:03 EST.

Respectfully Submitted,

Concurred,

Donald G. Barnes, Ph.D.  
Designated Federal Official

William Glaze, Ph.D.  
Chair, Executive Committee



## ATTACHMENTS

Attachment A -- Sign-in sheet for Ariel Rios Room 6013.  
Attachment B -- Agenda for the August 27, 2001 EC conference call.  
Attachment C -- Roster of the SAB Executive Committee  
Attachment D -- Dr. Stavins's comments on the arsenic report.  
Attachment E -- Dr. Morgan's comments on the arsenic report.  
Attachment F -- Dr. Johnson's comments on the arsenic report.  
Attachment G-- Letter from public interest groups on the arsenic report  
Attachment H -- Letter from Drs. Heiznerling and Ackerman  
Attachment I -- Dr. Morandi's comments on the RSAC Peer Review report.  
Attachment J --  
Attachment K --  
Attachment L --  
Attachment M --  
Attachment N --  
Attachment O --  
Attachment P --